



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,036	11/14/2003	Robert E. Levin	026171.0006	1398
7590 Thomas F. Bergert Williams Mullen, PC Suite 700 8270 Greensboro Drive McLean, VA 22102		03/04/2008	EXAMINER SAINT CYR, LEONARD	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 03/04/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/714,036	<b>Applicant(s)</b> LEVIN, ROBERT E.	
	<b>Examiner</b> LEONARD SAINT CYR	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1 - 27 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Sadhwani et al. (US PAP 200210069048), in view of Chong et al., (US Patent 5,535,120), and further in view of Wakisaka et al., (US Patent 5,917,944).

As per claims 1, 4, Sadhwani et al. discloses a method of translating speech and delivering it to a communications device (see paragraph [0002]), comprising the steps of:

receiving a request from a first communications device for speech translation services at a server device running a speech translation application, (see paragraph [0010]; paragraph [0034]);

retrieving a first voice input signal associated with the request from a first communication path (see paragraph [0010] and [0034]);

translating the voice input signal from a source language to a target language message using said speech translation application (see 0033)]; and

sending the target language message to a second communications device using a second communication path (see paragraph [0034], where sending the message is separate from the request, thus utilizing a second communication path), at least a portion of said target language message being revealed audibly via a second device speaker or visibly on a display of said second device (see paragraph [0034]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught

by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.

Regarding claim 2, Sadhwani et al. discloses the method of claim 1, further disclosing wherein the first communication path is established on a wireless communication network (see paragraph [0029] and [0034], where the communication device can be a mobile phone or the request of the information source can be sent in the form of an email, thus the communication path is on a wireless communication network).

Regarding claim 3, Sadhwani et al. discloses the method of claim 1, further disclosing wherein a source language or a target language is automatically determined

based on said received request (see paragraph [0040] where the user requests the retrieval of the information and determines the target language).

Regarding claim 5, Sadhwani et al. discloses the method of claim 1, further disclosing wherein said speech translation application includes a dictionary search component capable of searching a resource for at least one second-type translation dictionary (see paragraph [0055], where the translations software used the method described).

Regarding claim 6, Sadhwani et al. discloses the method of claim 1, further disclosing wherein the request received includes user specific identification information (see paragraph [0039] where the PIN is the users identification information).

Regarding claim 7, Sadhwani et al. discloses the method of claim 6, wherein the user specific identification information is used to retrieve user specific files to process the request for speech translation services (see paragraph [0049], access to personal organizer is user specific information).

Regarding claim 8, Sadhwani et al. disclose the method of claim 1, further disclosing wherein the request received from the wireless communication device includes device specific identification information (see paragraph [0038] where T-link number is the device identifier).

Regarding claim 9, Sadhwani et al. discloses the method of claim 8, further disclosing wherein the device specific identification information is used to retrieve user specific files to process the request for speech translation services (see paragraph [0049] where the address book is accessible).

Regarding claim 10, Sadhwani et al. discloses a wireless communication system providing speech translation services (see paragraph [0029]), comprising: a wireless communication device providing voice input for speech translation processing on a first communication path (see paragraph [0029] where a mobile phone can be used as a communication device), said device also providing sending and receiving party information (see paragraphs [0041], where the user has the option to reply, thus providing the sending information and [0046], where the user has the option to access their own menus; and

a server device running a speech translation application receiving voice input from said wireless communication device on said first communication path (see paragraph [0042]), converting the received voice input into a text file (see paragraph [0055]), translating the text file based on determining a language pair from at least one of said sending and receiving party information (see paragraph [0055]), and sending the translated information to a remote device using a second communication path (see paragraph [0054]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of



Art Unit: 2626

sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.

Regarding claims 11, 14, Sadhwani et al. discloses a system for facilitating translation of a communication from or to a remote communication device (see paragraph [0029]), comprising:

a wireless communication device capable of: receiving a translated message; and displaying the translated message on a visual display of the wireless communication device (see paragraph [0029] where a mobile phone is used as the communication device); and

a translation apparatus capable of: receiving a message for translation from a first user, said message including sending and receiving party information and a speech element (see paragraph[0030] and [0033]); searching a message translation database using at least one of the sending and receiving party identification information to determine a language pair (see paragraph [0055]); in response to determining said language pair, translating said message speech element from a first language of said language pair to a second language of said language pair (see paragraph [0055]); and communicating at least a portion of said translated message to said wireless communication device (see paragraphs [0076] - [0080]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of

sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.

Regarding claim 12, Sadhwani et al. discloses the system of claim 11, further disclosing wherein the translation apparatus searches at least one translation dictionary based on said received message (see paragraph [0055]).

Regarding claim 13, Sadhwani et al. discloses the system of claim 11, further disclosing wherein said first and second languages of said language pair automatically determined based on said received message (see paragraph [0040] where the user requests the retrieval of the information and determines the target language).

Regarding claim 15, Chong et al., further disclose that said translation apparatus includes a dictionary search component capable of searching a resource for at least one second- type translation dictionary (col.4, lines 3 – 7).

Regarding claim 16, Sadhwani et al. discloses the system of claim 11, further disclosing wherein said user is a mobile subscriber (see ~paragraph [0029] where a mobile phone can be used).

Regarding claim 17, Sadhwani et al. discloses the system of claim 11, further disclosing wherein said user is a network operator (see paragraph [0038] where the user is prompted by an automated operator).

As per claim 18, Chong et al., further suggest translation apparatus accesses a specialized dictionary of said language pair based on said sending and receiving party information ("dictionary deemed applicable"; col.4, lines 17 – 22).

As per claim 19, Wakisaka et al., further suggest detecting a plurality of topics in a received message, including identify new topics and identifying the recurrence of a previously identified topic (col.6, lines 1 - 4).

Regarding claim 20, Sadhwani et al. discloses the system of claim 11, further disclosing wherein said received message includes device specific identification information (see paragraph [0038] where T-link number is the device identifier).

Regarding claim 21, Sadhwani et al. discloses the system of claim 20, further disclosing wherein said device specific identification information is used to retrieve sender or receiver specific files to translate said message speech element (see paragraph [0049] where the address book is accessible).

Regarding claim 22, Sadhwani et al. discloses a system for facilitating translation of a communication from or to a remote communication device, comprising: a wireless communication device capable of:

receiving a translated message; and revealing the translated message via a speaker of the wireless communication device (see paragraph [0029] where a mobile phone is used as the communication device); and

a translation apparatus capable of: receiving a message for translation from a first user, said message including sending and receiving party information and a speech element (see paragraph [0054]); searching a message translation database using at least one of the sending and receiving party identification information to determine a language pair (see paragraph [0055]);

in response to determining said language pair, translating said message speech element from a first language of said language pair to a second language of said language pair (see paragraph [0055]); and communicating at least a portion of said translated message to said wireless communication device (see paragraphs [0076] - [00.80]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.

Regarding claim 23, Sadhwani et al. discloses a method of translating speech and delivering it to a wireless communications device (see paragraph [00402]), comprising the steps of:

receiving spoken input from a first wireless communications device at a server device running a translation application (see paragraph [0030] and [0033]); receiving a signal associated with said spoken input (see paragraph [0054]), said signal corresponding to either a display selection from an interface display on said first wireless communications device or a spoken input received by said first wireless communications device (see paragraph [0075] and [0077]), said signal indicative of a translation request (see paragraph [0054]);

translating the spoken input from a source language to a target language using said speech translation application so as to construct a translated message (see paragraph [0055]), said source language and said target language being determined by input received by said first wireless communications device (see paragraph [0042] and [0054]); and

communicating the translated message to a second wireless communications device (see paragraph [0043] - [0045]), at least a portion of said translated message being revealed audibly via a second device speaker or visibly on a display of said second device (see paragraphs [0052]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by

Art Unit: 2626

matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.



Regarding claim 24, Sadhwani et al. discloses the method of claim 23, further disclosing wherein said input for determining said source and target language includes a selection by a user of said first device of source and target languages from a display on said first device display (see paragraph [0042] and [0054]).

Regarding claim 25, Sadhwani et al. discloses the method of claim 23, further disclosing wherein said input for determining said source language is sending party information and said input for determining said target language is receiving party information (see paragraphs 46 - 51).

Regarding claim 26, Sadhwani et al. discloses the method of claim 25, further disclosing wherein said receiving party information is a short code (see paragraph [0054] where the code is a T-link number).

Regarding claim 27, Sadhwani et al. discloses a method of translating speech and delivering it to a wireless communications device, comprising the steps of:

receiving spoken input from a first wireless communications device at a server device running a translation application (see paragraph [0054]);

receiving a signal associated with said spoken input at said server device (see paragraph [0054]), said signal corresponding to either a display selection from an interface display on said first wireless communications device or a spoken input received by said first wireless

Art Unit: 2626

communications device(see paragraph [0075] and [0077]), said signal indicative of a translation request (see paragraph [0054]);

translating the spoken input from a source language to a target language using said speech translation application so as to construct a translated message (see paragraph [0055]), said speech translation application using at least a core dictionary associated with said source language and said target language (see paragraph [0055], where the translation programs listed use a core dictionary); and

communicating the translated message to a second wireless communications device (see paragraph [0076] - [0080]).

However, Sadhwani et al. do not specifically teach that the speech translation application includes a plurality of translation dictionaries including at least one core language dictionary and a plurality of sub-language dictionaries; detecting a first topic based on the voice signal by matching words in the input signal to nodes in an ontological database; and associating at least a first one of the translation dictionaries with the input signal based on the detected topic.

Wakisaka et al., teach that the recognition system is provided with the dictionary 112, and the grammar dictionary; the coded data which represent a word or sentence and which are output from the recognition system are analyzed by the keyword analysis unit to judge whether the word or sentence is an effective keyword for translation, and the meaning of such a word or sentence is recognized on the basis of the keyword (col.8, lines 1 – 14, and 52 - 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate sentences based identified keyword as taught by Wakisaka et al., in Sadhwani et al., because that would make the system more efficient, by reducing translation error due to miss-classification of input sentence.

Chong et al., teach a dictionary database including a core language dictionary containing entries for generic words of the source and target languages, and a plurality of sublanguage dictionaries each containing entries for specialized words of a sublanguages (col.4, lines 3 – 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a core language dictionary and a plurality of sublanguage dictionaries as taught by Chong et al., in Wakisaka et al., in Sadhwani et al., because that would make the translation system more efficient, by using appropriated dictionaries during translation.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2626

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS  
02/28/08

  
RICHEMOND DORVIL  
SUPERVISORY PATENT EXAMINER